Geophysical Research Abstracts,
Vol. 11, EGU2009-6488, 2009
EGU General Assembly 2009

The motion mechanism of some long runout landslides triggered by 2008 Wenchuan earthquake, China

F.W. Wang (1), P. Sun (2), Y.P. Yin (3), L. Highland (4), and Q.G. Cheng (5)

(1) Disaster Prevention Research Institute, Kyoto University, Kyoto, Japan (wang.fawu@gmail.com / Fax: +81-774-38-4300), (2) Institute of Geomechanics, Chinese Academy of Geological Sciences, Beijing, China, (3) China Geological Survey, Beijing, China, (4) U.S. Geological Survey, Denver, USA, (5) Southwest Jiaotong University, Chengdu, China

The Ms 8.0 Wenchuan earthquake, or G̈reat Sichuan Earthquakeöccurred on 12 May 2008 in Sichuan Province, China. Damage by earthquake-induced landslides was an important part of the total earthquake damage. This presentation presents preliminary observations on the Hongyan Resort slide located southwest of the main epicenter, shallow mountain surface failures in Xuankou village of Yingxiu Town, the Jiufengchun slide near Longmenshan Town, the Hongsong Hydro-power Station slide near Hongbai Town, the Xiaojiaqiao slide in Chaping Town, two landslides in Beichuan County-town which destroyed a large part of the town, and the Donghekou and Shibangou slides in Qingchuan County which formed the second biggest landslide lake formed in this earthquake. The influences of seismic, topographic, geologic and hydro-geologic conditions are discussed.
A geotechnical simulation test with ring shear apparatus on the Donghekou landslide was conducted to clarify the motion mechanism of the long runout landslide. The results will also reported.